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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,795	08/08/2001	Carl Robert Posthuma	30	2806

7590

06/29/2005

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EXAMINER

LUGO, DAVID B

ART UNIT PAPER NUMBER

2637

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,795

Applicant(s)

POSTHUMA, CARL ROBERT

Examiner

David B. Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the functional language limitations recited in claims 1-6, it is noted that apparatus claims must be distinguishable from the prior art in terms of structure rather than function. See MPEP § 2114. In the instant application, claims 1-6 are drawn to an apparatus for adjusting the maximum bit-rate of a DSL bound in a binder group, comprising controllers for each of the DSLs and processor means. As indicated in the previous Office action, a processor may be programmed to perform an innumerable number of processes. Recitation of a processor for performing a specific function does not patentably distinguish over a prior art processor that is capable of performing the recited functions.

Drawings

2. The replacement drawings were received on 3/21/05. These drawings are acceptable.

Claim Objections

3. Claims 1-6 are objected to because of the following informalities:

- a. Claim 1, line 1, "the maximum bit-rate" should be --a maximum bit-rate--.
 - b. Claim 1, lines 11-12, "the allowable bit-rate" should be --an allowable bit-rate--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginis et al. U.S. Patent Application Publication 2003/0086514 in view of Chen U.S. Patent 5,970,088 (previously cited).

Regarding claim 1, Ginis et al. disclose an apparatus in Figure 7 comprising a communication adaptation module 715, considered a processor for storing and analyzing bit rates for active DSLs supplied by line and signal characteristics module 716, where line characteristics include crosstalk functions (pg. 6, para. 68) and signal characteristics include bit allocation information (pg. 6, para. 69). Ginis et al. further state that the system is useful in DSL systems where various lines are bound in a binder (pg. 6, para. 71; also see Figs. 2, 4, 6). The processor means of Ginis et al. is considered capable of performing the functional limitations of detecting if bit-rates for all DSLs in a binder group correspond to an unacceptable level of cross-talk, and responsive to detection of an unacceptable level of cross-talk, reducing the allowable bit-rate of one or more active DSLs of the binder group to lower the cross-talk level since it is a processor capable of executing computer instructions. The adaptation module 715 is connected to a number of subscriber lines and gathers information for the provisioning of improved services (pg. 6, para. 66). Ginis et al. do not expressly show that each of the DSLs includes a controller having means for requesting a bit-rate for a DSL controlled by the controller.

Chen discloses a DSL system where each modem performs a rate negotiation by sending its rate capabilities and its preference to a central office end during a rate negotiation where a rate is selected (col. 13, lines 10-13). Each modem is thus considered to include controllers having means for requesting a bit-rate for a DSL controlled by the controller.

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It would have been obvious to one of ordinary skill in the art to include controllers for each of the DSLs in the system of Ginis et al. in order to control rate selection for the DSLs.

Regarding claim 2, the apparatus of Ginis et al. is considered to be capable of activating an additional DSL line if the unacceptable level is above a level detected by the processor means.

Regarding claim 3, the apparatus of Ginis et al. is considered to be capable of reducing the allowable bit-rate of one or more DSLs of the binder group if bit-rates of all DSLs are above the unacceptable level.

Regarding claim 4, the apparatus of Ginis et al. is considered to be capable of raising the allowable bit-rate of one or more DSLs if the allowable bit-rate of all active DSLs in the binder group corresponds to a value less than the unacceptable level of cross-talk.

Regarding claim 5, the apparatus of Ginis et al. is considered to be capable of adjusting the unacceptable level upward if surrounding binder groups have a level of cross-talk substantially less than an unacceptable level for the surrounding binder groups.

Regarding claim 6, the apparatus of Ginis et al. is considered to be capable of being programmed to perform the detection step at intervals sufficiently frequent to minimize the probability of exceeding an allowable error rate.

Conclusion

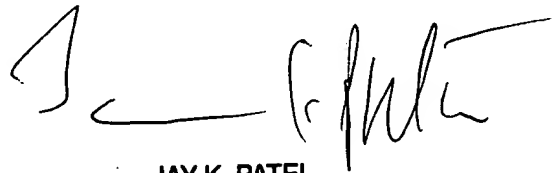
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Lugo whose telephone number is 571-272-3043. The examiner can normally be reached on M-F; 9:30-6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Lugo
6/23/05

A handwritten signature in black ink, appearing to read 'J. K. Patel', is written over a horizontal line.

JAY K. PATEL
SUPERVISORY PATENT EXAMINER